International Research Journal Of Business and Strategic Management

Vol 2, Issue 2, pp 450-460, July 12, 2021, © International Research Journal Publishers, ISSN 2710-2742 (online) www.irjp.org

EFFECTS OF AGENCY BANKING ON OPERATIONAL EFFICIENCY OF COMMERCIAL BANKS IN KENYA

Dr. Fred Sporta[1] & Tiberious Wesonga Muganda[2]

[1,2]School of Business and Public Management, KCA University, Kenya

Accepted July 12, 2021

ABSTRACT

The core objective of this study was to determine the relationship between agency banking and the operational efficiency of commercial banks in Kenya. The target population comprised of 15 commercial banks that utilized agency banking. The study covered the period 2014-2018 and thus the findings fundamentally reflect the events and conditions that happened during that period. Various diagnostic tests were done on the data to test normality, multicollinearity and heteroscedasticity. The data was analyzed using descriptive statistics and panel data analysis. The results revealed that agency banking has a significant effect on operational efficiency. It was found that agency banking affected the operating efficiency. The study recommends that the banks should design a digital strategy anchored on strong knowledge of their digital maturity, business operating models, flexibility and human capital. The banks should also consider fostering partnerships with technology start-ups or other third-party relationships in order to maximize the benefits of agency banking innovations.

Keywords: *Agency Banking, Operational Efficiency*

INTRODUCTION

The economic development of countries is partly attributed to the extent of financial inclusion amongst the citizenry. There are a number of strategies that financial institutions have embraced to enhance financial inclusion; agency banking is presumably one of them. It is thus important to examine the various attributes of agency banking and how they influence financial inclusion (Realini & Mehta (2015). According to Mwando (2013), agency banking describes a banking model where banks provide services through non-bank agents, such as grocery stores, retail outlets, post offices, pharmacies, or lottery outlets. This model allows banks to expand services into areas where they do not have sufficient incentive or capacity to establish a formal branch. This is normally the case in rural and poor areas where a high percentage of people are unbanked. Agency banking is quickly becoming recognized as a viable strategy in many

countries for extending formal financial services into poor and rural areas. In recent years, agent banking has been adopted and implemented with varying degrees of success by a number of developing countries, especially the Latin America (Garza-Garcia & Girardone, 2011).

Brazil is more often than not considered as the global pioneer of agency banking due to the fact that it was an early adopter of the model and over the years has developed a mature network of agent banks covering more than 99% of the country's municipalities. Other countries in Latin America that have followed suit include Peru 2005, Colombia 2006, Bolivia 2006, Equador 2008, Venezuela 2009, and Argentina 2009. Other countries that have adopted and utilized the agency banking model are Pakistan, Kenya, South Africa, the Philippines, Uganda and India. The regulation, design and implementation of agent banking vary across countries. The differences are evidenced in the variety of services offered by agents, the types of businesses acting as agents, the types of financial institutions that work through agents and the business structures employed to manage them (World Bank Group, 2016).

Agency banking was introduced in Kenya in 2010 according to Ndungu and Njeru (2014). It is observed that the involvement of key stakeholders in implementation of agency banking cannot be understated. The stakeholders should be drawn from both the public and private sectors. The stakeholders should participate in rolling out of mobile financial services model. The OPM (2011) report further underscores the importance of prioritizing and coordinating the national financial inclusion agenda. It is asserted that Kenya engaged in discussion with the Alliance for Financial Inclusion (AFI) regarding support for strategic financial inclusions. Agency banking is a model that is aimed at enhancing financial inclusion by reaching out to millions of people in need of financial services (Mutsune, 2015).

According to bank supervision and annual report (2014), the banking sector in Kenya comprise of 44 banking institutions, 9 microfinance banks, 2 credit reference bureaus, 87 foreign exchange bureaus, 8 representative offices of foreign banks, 13 money remittance providers and the central bank which is the regulatory authority. The report further documents that the sector has had an improved performance in the year 2014 recording an 18.5 percent growth in total net assets and 18.65 percent rise in customer deposits up from 2013. This has been ascribed to higher demand for credit in the year 2014 and increased deposit mobilization by the banks as a result of outreach and service networks to serve the under(un)served market.

Other notable development in the sector include the introduction of Kenya banks' reference rate aimed at increasing the transparency of credit pricing by commercial banks, the coming into force of the microfinance amendment Act of 2013 that permits the institutions to operate current accounts, issue third parties checks and engage in forex trading, among others. In the first quarter of the year 2015, it was observed that the sector has improved performance in terms of the net assets, loans and advances, profitability and deposit base. It is envisioned that the sector would remain stable and resilient as the banks explore new opportunities locally and beyond.

In Kenya large number of the population is excluded from access to financial services in the financial sector with the situation being worse in rural areas. Most of the individuals in Kenya especially those living in rural or remote areas where infrastructural development is a problem, access to banking services has been a very disturbing problem. In the old times people used to travel for long distance so as to access financial services from banks and this was consuming most of their time and more spending on transport cost.

According to Munoru (2013) the aim of agent banking was to increase the level of formal financial inclusion in un-served and underserved areas. With the introduction of agency banking

services in Kenya's financial system, convenient and affordable banking services continue to be availed to the large masses without the mortar and brick branches.

Guo and Liang (2016) stated that the financial services delivery process is fraught with problems, such as operational risk, transaction lag, efficiency bottlenecks, and fraud. Applying technology can however resolve a majority these problems. It is usually emphasized that efficiency in business operation by corporate entities especially banks that perform the fiduciary role of financial intermediation cannot be underestimated (Kortmann, 2014). Efficiency remain an important attribute of organizational performance since all resources/ inputs are limited and scarce (time, raw materials and money), thus makes sense economically trying to save them and still maintaining an acceptable output level.

According to Kliestik and Streimikiene (2017), banking efficiency is important to management science since it will enable banks to trace the sources of inefficiency and help to enhance survival in the highly competitive market where they operate and subsequently the general economy to grow. However, a myriad of factors are responsible for influencing the operational efficiency of a corporate entity such as bank.

According to Odeleye (2014) efficiency within the operations of banking may be differentiated amid banking allocative efficiency which needs a benefit/ cost ratio whereas technical efficiency concerns out puts on frontier production curve. Allocative efficiency measures the level of allocation of resources to the need with a high anticipated value, whereas a company is efficient technically in case it generates baby certain amount of specified outputs by use of the least probable volume of inputs. Effective and efficient resource usage is a fundamental goal to bankers and long run viability of the banks carrying out business in an environment that is highly competitive which partly relies on how competitively and efficiently they are being operated (Olasupo, Afolami & Shittu, 2014).

Efficiency indicators are observable factors that seem to determine/assess the level of efficiency in an organization. At best, they are performance indicator approximations with experiences drawn from the advanced world as against the LDCs owning to the level of both money and capital market developments. Martin and Zimková (2015) argued that when financial institutions become more efficient and competitive, this leads to a better allocation of individual and institution savings to more productive investments that improve economic growth. Outputs could be loans and advances or total balance of deposits, while inputs include labor, capital and other operating costs. Allocative efficiency is commonly used in the banking sector means the efficient and effective use of bank resources as key objective of every banker and as the primary tool or weapon to use in achieving the overall goal of the firm /bank (Odeleye, 2014). The Cost to income ratio(CIR) which compares the cost of producing a product or service with the revenues generated by the same product is a key measure of operational efficiency because it establishes the operating margin of the firm (Hussain, 2018).

Statement of the Problem

Creating value and achieving a competitive edge in commercial banks heavily relies on better operational efficiency and creativity of financial institutions (Hussain, 2014). The benefits of efficient operations in commercial banks have increased customer satisfaction, lower operational cost and the ability to stay ahead of competition (Munguti, 2006). The world financial crisis of 2007-2009 is a sharp reminder that financial innovation can come along with substantial costs and drawbacks as well as benefits. Hussain (2014), note that financial innovations can be a major cause of risk that is systematic in nature accompanied by extra costs. When the costs outweigh the benefits, such financial innovations become negative and unnecessary. If commercial banks

underestimate the risks of new financial products, the resulting uncertainty may contribute to loss of key markets and customers.

The financial services market in Kenya has been an arena of radical transformation since Kenya started to register economic growth in early 2003 (Gitau, 2011). Commercial banks in Kenya started to compete for Kenya's hugely unbanked population. Having been hailed as an important factor in determining whether banks compete effectively in their chosen market area, the financial innovation through mobile banking has received a growing attention in both professional and academic literature (Pasha, 2009).

Although studies have been carried out on the contribution of financial innovation, there still exists confusion in the literature on its actual contribution on operational efficiency in commercial banks. Particularly, in Kenya where financial innovation products in commercial banks are robust, yet, quantifiable studies on the contribution of financial innovation are still not well documented. This study sought to build on the previous studies done on the subject, while at the same time, fill in the existing knowledge gap which generalizes financial innovation as one concept and operational efficiency as another. It sought to relate mobile banking to the operational efficiency of commercial banks in Kenya.

Objective of the study

- To determine the relationship between agency banking and operational efficiency in commercial banks in Kenya.

LITERATURE REVIEW

Agency theory

The first scholars to propose, explicitly, that a theory of agency, be created, and to begin its creation, were Stephen Ross and Barry Mitnick, independently and roughly concurrently. Ross is responsible for the origin of the economic theory of agency, and Mitnick for the institutional theory of agency, though the basic concepts underlying these approaches are similar. Indeed, the approaches can be seen as complementary in their uses of similar concepts under different assumptions; in short, Ross introduced the study of agency in terms of problems of compensation contracting; agency was seen in essence, as an incentives problem. Mitnick introduced the now common insight that institutions form around agency, and evolve a deal with agency, in response to the essential imperfection of agency relationships. Behavior never occurs as it is preferred by the principal because it does not pay to make it perfect (Mitnick, 2015).

Ross lays out the problem with great clarity as well as brevity in a paper he delivered at the December 1972 economics meeting. Ross identifies the agency problem as generic in society, not merely as a problem in the theory of the firm. This sets his work apart from the existing stream on the theory of the firm as well as the more general formal approaches on decision making under risk or uncertainty and under different information states (Darayseh & Chazi, 2018).

Agency is a theory explaining the relationship between principals, such as a shareholders and agents such as a company's executives. In this relationship the principal delegates or hires an agent to perform work. The theory attempts to deal with two specific problems; first, that the goals of the principal and agent are not in conflict (agency problem), and second, that the principal and agent reconcile different tolerances for risk (Bergen & Walker, 1992).

Agency theory explains how to best organize relationship in which one party determines the work while another party does the work .In this relationship, the principal hires an agent to do

the work, or to perform a task the principal is unable or unwilling to do due to some factors. For example, in corporations, the principal are the shareholders of a company, delegating to the agent i.e the management of the company, to perform tasks on their behalf. Agency theory assumes both the principal and the agent are motivated by self-interest; this assumption of self-interest dooms agency theory to inevitable inherent conflicts (Sappington, 1991). Thus, if both parties are motivated by self-interest, agents are likely to pursue self-interested objectives that deviate and even conflict with the goals of the principal: yet, agents are supposed to act in the sole interest of their principals.

According to Fontrodona and Sison (2006), one objection to agency theory is that it relies on an assumption of self-interested agents who seek to: maximize personal economic wealth. The challenge is therefore to get agents to either set aside their self-interest or work in a way in which they may maximize their personal wealth while still maximizing the wealth of the principal. Thus, a standard of agency duty and action is necessary, not because agents are universally selfish, but because the potential for differences between the principal's and the agent's interests exists. In agency relationships the agent has a moral responsibility for her actions which she cannot dismiss simply because she acts as an agent for another.

Empirical Review

Njunji (2013) carried out a survey on agency banking adoption by commercial banks in Nakuru.She employed a descriptive survey design in her study. This design was deemed appropriate because the data collected is used to test the hypothesis and answer questions on the subjects of the study concerning their opinions and attitudes. It concentrated on the adoption of Agency banking in Co-operative Bank, Equity Bank and Kenya Commercial Bank because the three institutions are considered pioneers of Agency banking in Kenya and as such they have a wealth of vital data that which is considered to be very relevant to the study. The objective was to survey the adoption of agency banking by commercial banks in Nakuru CBD. The research found that agent banking services, agent banking efficiency and clienteles perception play a crucial part in enhancing bank performance. Each variable not only influence bank performance but also complement each other as well.

Chelagat (2013) studied agency banking and its effect on financial inclusion in Kenya. A cross sectional survey was employed to investigate the variables. The study attempted to understand, describe and explain the effects of agency banking on financial inclusion in commercial banks in Kenya without altering or tampering with any of the study variables. Inferential statistical techniques (regression analysis), were applied to predict financial inclusion based on the covariance with agency banking. The findings showed the existence of a positive relationship between agency banking and financial inclusion. The correlation coefficient between the two variables was 0.727, which showed strong relationship. The R-square (coefficient of determination) also showed that 52.9% of the variance in the financial inclusion variable can be explained by aspects of agency banking.

Ndegwa (2017) carried out an analysis of how effective agency banking is as a Strategy of achieving financial inclusion among Commercial Banks within Kiambu Town. The study objective was to establish the effect of geographical coverage and liquidity on agency banking as a financial inclusion strategy. The study adopted a cross-sectional survey design. The study found out that geographical coverage is the most important driver of financial inclusion. It reduces transport costs by customers and the need to queue in ATM and banking halls to make payments or withdrawals. Because of these convenience customers don't mind paying a few more shillings for agent services. Availability of liquidity is another benefit of agent banking.

Infrequent shortage of cash at the agent banking outlet increases customers' satisfaction and trust with the agent banking model.

Wawira (2013) carried out a study on agency banking and its contribution to the financial performance of commercial banks in Kenya. It employed descriptive survey design which enables a researcher to acquire enough information about the study variables in any chosen area. The conclusion was that the move by the central bank to regulate agency banking apart from helping to promote efficiency, confidence and public trust, it had also influenced the performance of commercial banks in Kenya positively.

Mbugua (2017) conducted a study on agency banking and financial performance of commercial banks in Embu County, Kenya. The study objective was to establish the effect of banking hall decongestion on the financial performance of Commercial Banks in Embu County, Kenya. The researcher intended to generalize the finding to a larger population so he used a descriptive research design. The study concluded that increased financial deepening in Embu County was as a result of ease of access to financial services in areas initially perceived as remote and this was due to adoption of agency banking.

Onwonga, Achoki and Omboi (2015) carried out a case study of Kisii County, Kenya regarding the Challenges facing the growth of Agency banking. The objectives were establishing the effect of technological requirements, customer's attitudes, customer information confidentiality and the effect of insecurity on agency banking in Kenya. A descriptive study design was used with the population of the study consisting of Agent Bank employees in Kisii County. The study found out that technological requirements, customer attitudes and customer information confidentiality are positively and significantly associated with growth of agent banking in Kisii County. Regarding, insecurity, the conclusion was that insecurity is negatively but insignificantly associated with growth of agency banking in Kenya.

Conceptual framework

The conceptual diagram illustrates that operational efficiency is a dependent variable and agent banking the independent variable.

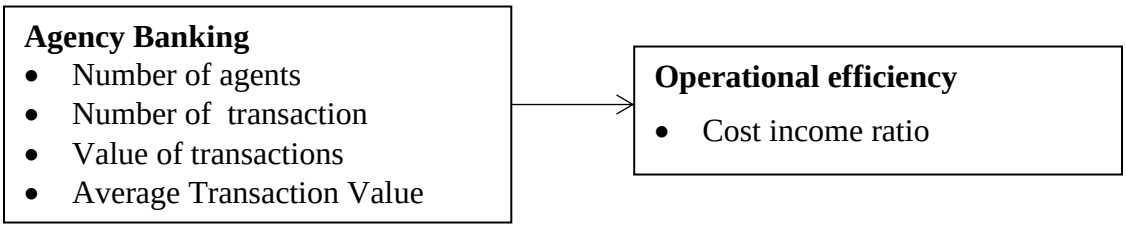

Figure 1: Conceptual framework

METHODOLOGY

Research Design

The study was conducted by the use of descriptive research design with the aim of determining the effect of financial innovation on the operational efficiency of commercial banks. According to Serakan (2003) a descriptive study is taken in order to know and explain the characteristics of the variable of interest.

Target Population

The target population describes the aggregate of individuals sharing common characteristics in respect to a given study (Kothari, 2004). As at 31st December 2018, there were 44 commercial

banks as per the CBK bank supervision report however only 15 of the banks fully utilized agency banking, mobile banking and internet banking services. Therefore, the target population of the study comprised of the 15 commercial banks in Kenya.

Data Collection

The collected data were quantitative in nature. Secondary sources of data were utilized in this study. Proxy information containing data on operational efficiency, mobile banking, agency banking and Internet banking of the commercial banks were gathered through annual reports published by the Central bank of Kenya. The dataset utilized covered the period from 2014 to 2018 inclusive.

Data Analysis

Both descriptive and inferential analyses were used in the study. The descriptive analysis provides simple summaries about the sample data and present quantitative descriptions in a manageable form, together with simple graphical analysis, descriptive statistics form the basis of virtually every quantitative analysis of data. The collected data for this study is analyzed using STATA software.

RESULTS

Descriptive Analysis

Table 1: Agency Banking

Year	Ob	Mean	Std	Min	Max
2014	15	719361466.7	2479578858	6363000	9994842000
2015	15	82894000	88939596.01	7073000	263938000
2016	15	110777333.3	107273465.3	8600000	298181000
2017	15	121494266.7	126627771.2	11577000	365267000
2018	15	138229600	142385501.3	14725000	398911000

The findings revealed that in year one the mean of agency banking value was 719361466.7, Std.dev was 2479578858, minimum was 6363000 and the maximum was 9994842000. In year two 82894000, Std.dev was 88939596.01, minimum was 7073000 and the maximum was 263938000. In year three 110777333.3, Std.dev was 107273465.3, minimum was 8600000 and the maximum was 298181000. In year four 121494266.7, Std.dev was 126627771.2, minimum was 11577000 and the maximum was 365267000. In year five 138229600, Std.dev was 142385501.3, minimum was 14725000 and the maximum was 398911000.

Table 2: Cost-Income Ratio

Cost-Income Ratio					
Year	**Ob**	**Mean**	**Std**	**Min**	**Max**
2014	15	51.35	7.16	42.30	63.4
2015	15	51.51	9.57	39.6	68.8
2016	15	52.11	13.07	36.1	85.4
2017	15	54.04	17.37	38	111
2018	15	53.11	17.77	41.1	110

The findings show that in year one the mean of cost – income ratio was 51.35, Std.dev was 7.16, minimum was 42.30 and the maximum was 63.4. In year two the mean was 51.51, Std.dev was 9.57, minimum was 39.6 and the maximum was 68.8. In year three the mean was 52.11, Std.dev was 13.07, minimum was 36.1 while the maximum was 85.4. In year four the mean was 54.04, Std.dev was 17.37, minimum was 38 and the maximum was 111. In year five the mean of cost-income ratio was 53.11, Std.dev was 17.77, minimum was 41.1 and the maximum was 110.

Correlations Analysis

Correlation analysis was conducted to determine the association between the study variables.

Table 3: Correlation matrix

	Operation efficiency	Agency Banking
Operation efficiency	1. 75	
Agency Banking	0.0803 0.0183	1 75

The correlation matrix results show that the study exhibited a weak correlation coefficient between operational efficiency and agency banking, as can be seen from the result of 0.0803. The relationship was significant since p value 0.0183 is less than 0.05.

Regression analysis

Table 4: Regression analysis

```
      Source |       SS       df       MS              Number of obs =      75
-------------+------------------------------           F(  1,    73) =    6.55
       Model |  55.21273      1  55.21273              Prob > F      =  0.0044
    Residual |  913010.1     73  12506.99              R-squared     =  0.338
-------------+------------------------------           Adj R-squared =  0.206
       Total |  913065.3     74  12338.72              Root MSE      =  111.835

------------------------------------------------------------------------------
           y |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          x1 |       0.181     0.044     4.124   0.011    0.038523    .4491244
       _cons |        8.86    7.5733      1.17   0.000     4.29277     15.4277
------------------------------------------------------------------------------
```

From the ANOVA statistics, the study established the regression model had a significance level of 0.0011 which is an indication that there was a significant relationship between the variables. The F critical value was less than the calculated value (0.3.972<6.55) an indication that there was a significant relationship between agency banking and operational efficiency as measured by the cost to income ratio. The p value which was less than 0.05 indicated that the relationship between agency banking and operational efficiency of commercial banks was significant. From the findings, the value of adjusted R squared was 0.206, an indication that there was variation of 0.206 on operational efficiency of commercial banks due to changes in agency banking at 95% confidence interval. This shows that only 20.6% of the changes on the operational efficiency of commercial banks could be accounted for by changes in agency banking. This shows that 79.4% of the change in operational efficiency was accounted for by other factors other than agency banking. From the above regression equation, it was revealed that holding agency banking to a constant zero, operational efficiency would be at 8.86. A unit increase in agency banking would lead to increase in operational efficiency by 0.181 units.

Conclusion

Based on the findings of this study, it is clear that agency banking has a weak positive effect on the operational efficiency of commercial banks. Despite the concluded positive impacts of agency banks, the relationship was weak. Implying there is a need for the banks to focus strategic development efforts on how to best leverage the agency banking innovations to support their respective firm objectives in regards to market cost reduction and operational efficiency.

Recommendations

In order to gain fully from the opportunities presented by financial innovations, commercials banks should design a digital strategy anchored on strong knowledge of their digital maturity, business operating models, flexibility and human capital. Introducing new innovations is likely to bring benefits if the employees of the banks are adapted to a new way of operating, responding to emerging customer behavior or, dealing with a significant increase in customer interactions.

Financial innovations are still a key influential factor in the operation of commercial banks in Kenya.

REFERENCES

Bergen, M., & Walker Jr, O. C. (1992). Agency relationships in marketing: A review of the implications and applications of agency and related theories. *Journal of marketing*, *56*(3), 1-24.

CBK, (2014). Bank supervision and annual report 2014.

Chelagat, K.G. (2013). The effect of agency banking on financial inclusion in Kenya. MBA Project University of Nairobi.

Darayseh, M., & Chazi, A. (2018). Bank specifics, economics environment, and agency theory: Determinants of banking performance in GCC. *The Journal of Developing Areas*, *52*(4), 199-212.

Fontrodona, J., & Sison, A. J. G. (2006). The nature of the firm, agency theory and shareholder theory: A critique from philosophical anthropology. *Journal of Business Ethics*, *66*(1), 33-42.

Garza-Garcia, J. G., & Girardone, C. (2011). Banking sector performance in Latin America: Market power versus efficiency. *Review of Development Economics*, *15*(2), 307-325.

Gitau, N. (2011). Political interference in the running of education in post-independence Kenya: A critical retrospection. *International Journal of Educational Development*, *23*(2), 127-144.

Guo, R., & Liang, W. (2016) Financial Innovations, Multinational banking and monetary policy, *Journal of Banking and Finance*, 537- 551.

Hussain, S. (2014). An analysis of the impact of 'substantially heightened'capital requirements on large financial institutions. *Booth School of Business, University of Chicago, mimeo*, *2*, 1-47.

Kliestik, T., & Streimikiene, D. (2017). Non-parametric approach to measuring the efficiency of banking sectors in European Union Countries. *Acta Polytechnica Hungarica*, *14*(7), 51-70.

Kortmann, S. (2014). Linking strategic flexibility and operational efficiency: The mediating role of ambidextrous operational capabilities. *Journal of Operations Management*, *32*(7-8), 475-490.

Kothari, S. (2016). Analysts' forecasts and asset pricing: A survey. *Annual Review of Financial Economics*, *8*, 197-219.

Martin, B., & Zimková, E. (2015). Efficiency in the Slovak banking industry: a comparison of three approaches. *Prague economic papers*, *2015*(4), 434-451.

Mbugua, I. N.(2017). Agency banking and financial performance of commercial banks in Embu County, Kenya. *International Academic Journal of Economics and Finance*, *2*(3), 348-367.

Mitnick, B. M. (2015). Agency theory. *Wiley encyclopedia of management*, 1-6.

Munguti, K. (2006). *The effect of mobile banking on the competitive advantage of commercial banks in Kenya* (Doctoral dissertation, United States International University-Africa).

Munoru, M. K. (2013). Effect of Agency Banking on Financial Inclusion in Kenya. *International Journal of Science and Research*, *7*, 6-14.

Mutsune, T. (2015). No Kenyan left behind: The model of Financial Inclusion through Mobile banking. *Review of Business & Finance Studies*, *6*(1), 35-42.

Mwando, S. (2013). Contribution of agency banking on financial performance of commercial banks in Kenya. *Journal of Economics and Sustainable Development*, *4*(20), 26-34.

Ndegwa,M.P.(2017).An Analysis of the Effectiveness of Agency Banking. As A Financial Inclusion Strategy in Commercial Banks (A Survey Of Selected Commercial Banks In Kiambu Town. International Journal of Business and Management Invention ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X

Ndungu, C. G., & Njeru, A. (2014). Assessment of factors influencing adoption of agency banking in Kenya: The case of Kajiado north sub county. *International journal of business and commerce*, *3*(8), 91-111.

Njunji, A.(2013).*A survey of adoption of agency banking by commercial banks in Nakuru CBD*.(MBA Project University of Nairobi).

Odeleye, A. T. (2014). Pre-consolidation and post-consolidation of Nigerian banking sector: A dynamic comparison. *International Journal of Economics and Financial Issues*, *4*(1), 27-34.

Olasupo, M. A., Afolami, C. A., & Shittu, A. M. (2014). Outreach and financial sustainability of microfinance banks in Southwest Nigeria. *International Journal of Economics and Finance*, *6*(2), 25-39.

Onwonga, M., Achoki,G & Omboi,B.(2017). Challenges facing growth of agency banking in Kenya: A case of Kisii county. *International Journal of Social Sciences and Entrepreneurship*, *1*(2), 613-620.

Pasha, B. (2013). Determinants of financial performance of commercial banks in Kenya. *International journal of economics and financial issues*, *3*(1), 237.

Realini, C., & Mehta, K. (2015). *Financial Inclusion at the Bottom of the Pyramid*. FriesenPress.

Sappington, D. E. (1991). Incentives in principal-agent relationships. *Journal of economic Perspectives*, *5*(2), 45-66.

Serakan, D. (2003). Special education teachers serving students with autism: A descriptive study of the characteristics and self-reported knowledge and practices employed. *Journal of Vocational Rehabilitation*, *35*(1), 37-50.

Wawira, N. J. (2013). Contribution of Agency Banking on Financial Performance of Commercial Banks in Kenya. *Unpublished MBA Project University of Nairobi*.

Wawira,N.J.(2013).Contributions of agency banking on financial performance of commercial banks in Kenya. MBA Project Kenya University.

World Bank Group. (2016). *World development report 2016: digital dividends*. World Bank Publications.